

Claims

1. A method for processing a biological sample for histological analysis, comprising contacting the sample with a composition comprising a supercritical or near supercritical fluid followed by impregnating the sample under a pressure of more than 1 bar with an embedding medium, preferably paraffin.  
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2. A method according to claim 1, wherein said supercritical or near supercritical fluid is carbon dioxide.
- 10 3. A method according to claim 1 or 2, wherein said biological sample is a fresh, frozen or fixed tissue sample, preferably a fresh, non-fixed sample.
4. A method according to any one of claims 1-3, wherein said biological sample comprises an organ or a part thereof.  
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5. A method according to any one of claims 1-4, wherein said sample is dehydrated, defatted and/or decalcified prior to impregnation, preferably by using a composition comprising a supercritical fluid.
- 20 6. A method according to claim 5, wherein said composition additionally comprises a dehydrating agent, preferably an alcohol.
7. A method according to claim 5 or 6, wherein said composition additionally comprises a decalcifying agent, preferably an acid.

8. A processor (1) for preparing at least one sample (10) for histological analysis, comprising at least one process reactor (9) for the at least one sample (10), characterized in that the processor (1) comprises supplying means (4) for  
5 supplying to the reactor (9) at least one substance of which at least one is in supercritical phase or near supercritical phase and at least one supplying means (7) for adding the embedding medium to the reactor (9) through conduit (8).
- 10 9. A processor (1) according to claim 8 , further comprising pressurizing and/or heating means (5, 6) for bringing a substance at the required pressure and/or temperature.
10. A processor (1) according to claim 8 or 9, further comprising  
15 separating means (11) for separating substances from a mixture of substances leaving the reactor (9).
11. A processor (1) according to any one of the claims 8 to 10, further comprising recycling means (13) for recycling substances discharged from the  
20 reactor (9).
12. Use of a processor according to any one of the claims 8 to 10 for processing a biological sample for histological analysis.